Back Injuries

Hazards: Back, neck and shoulder pain, sprains and strains, pinched nerves and slipped disks.

Background: Most injuries occur from lifting, lowering, carrying, pushing and pulling materials. You are at higher risk of low-back injury if you often carry heavy loads, must twist while carrying heavy loads, or work a lot while bent over or in other awkward postures.

Safe Practices:

- Perform warm-up exercises before work.
- Reduce carrying distances by delivering materials close to where they will be used.
- Try to store materials at waist height.
- Raise your work surface to waist level (e.g., pipefitters can use pipe stands, masons can use adjustable scaffolds).
- Ensure floors and walking surfaces are clear and dry.
- Take rest breaks before getting too tired.
- Use carts, dollies, forklifts and hoists to move materials.
- Use carrying tools with handles to get a good grip on wallboard or odd-shaped loads.
- When lifting or carrying materials, keep the load as close to your body as you can.
- Try not to twist when lifting and lowering materials. Turn your whole body instead.
- Lift and lower materials in a smooth steady way. Try not to jerk the lift.
- Try supporting yourself by leaning on something while performing a low lift.
- Don't bend over; instead, kneel on one knee and pull the load up onto your knee before standing. (Wear kneepads when you kneel.)
- Ensure young apprentices are protected against back injuries, so they will not receive back injuries and have to leave the trade.
- Work with your employer to decide how the work can be changed to protect you and your co-workers from back injuries.
- Injuries can be reduced by planning, changing how work is performed, and training workers and supervisors.

Silica

What Is Crystalline Silica? Crystalline silica is a basic component of soil, sand, granite and many other minerals. Quartz is the most common form of crystalline silica. The dust may become respirable-size particles when workers chip, cut, drill or grind objects that contain crystalline silica.

Hazards: Crystalline silica has been classified as a human lung carcinogen. Breathing crystalline silica dust can cause silicosis, which can cause severe shortness of breath, weakness, weight loss, fatigue, chest pain, and in severe cases can be disabling or even fatal. Smoking adds to the damage caused by silica dust.

Controls:

- Replace crystalline silica materials with safer substitutes.
- Use engineering controls, such as local exhaust ventilation and blasting cabinets.
- Use protective equipment or other protective measures to reduce exposures below PEL.
- Use work practices controls, such as water sprays, when cutting bricks and blocks.
- Wear only N95 NIOSH certified respirators, if respiratory protection is required.
- Do not alter the respirator.
- Respirators cannot be worn by workers with facial hair, such as beards. It prevents a good seal between the respirator and the face.
- Wear only a Type CE abrasive-blast supplied-air respirator for abrasive blasting.
- Shower if facilities are available and vacuum the dust from your clothes or change into clean clothing before leaving the worksite.
- Participate in training, exposure monitoring, and health screening and surveillance programs to monitor any adverse health effects caused by crystalline silica exposures.
- Do not eat, drink, apply cosmetics or smoke in areas where crystalline silica dust is present.

Remember: If it's silica, it's not just dust.

Asbestos

Asbestos: Asbestos fibers are very small. If you inhale them, they go deep into your lungs and cause disease up to 40 years later.

Hazards: Exposure to asbestos has been shown to cause lung cancer, mesothelioma, and cancer of the stomach and colon. Smoking increases the health risk.

How Does Asbestos Exposure Occur?

- Asbestos products can release fibers into the air when they are friable, abraded, cut or disturbed. Asbestos products are called friable when you can crush them with finger and hand pressure alone. Exposure is most likely when renovating or demolishing older structures.

Common Sources:

Asbestos may be in roofing felt, roof patch material, vinyl tile, linoleum backing, "transite," asbestos cement pipe and sheet, pipe insulation, fireproofing, and spray-on decorative acoustical ceiling material. Most new products don't contain asbestos (but foreign materials may contain it).

Safe Practices:

- Assign a competent person to administer the company's exposure control plan.
- Send suspected materials for testing.
- Conduct daily or periodic air monitoring depending on the class of work performed.
- Train crews who will work with asbestos.
- Have workers get regular medical exams.

Controls:

- Restrict access to the asbestos area.
- Post warning signs.
- Use HEPA filtered respirators (not just dust masks) and full body coverings.
- Wet down the asbestos to reduce dust.
- Use power tools with special exhaust filters.
- Material containing asbestos (e.g., waste, scrap and contaminated clothing that is removed from buildings) must be disposed of in leak-tight 6-mil thick plastic bags, plastic-lined cardboard containers or plastic-lined metal containers.